

Amendments to the Claims

1. (currently amended) ~~The A~~ method of measuring ~~of~~ spectroscopic properties of loose products ~~that comprises~~ comprising:

~~periodic~~ periodically ~~delivery~~ delivering a ~~of the~~ measured sample of the loose products to the a measurement zone using a portioned sampling unit, loading device, wherein the measurement zone includes a horizontal section, wherein the portioned sampling unit delivers the sample to the measurement zone in portions of substantially equal volume, not less than two portions being used to fill the measurement zone, including substantially alternately putting the portions in different areas of the horizontal section of the measurement zone so as to provide substantially uniform filling and substantially constant bulk density of the sample within the measurement zone;

~~registration of the~~ registering spectroscopic properties of the sample in standstill across the different areas of the horizontal section ~~and further and;~~

~~removal of~~ removing the sample from the measurement zone

~~, wherein the sample is delivered to the measurement zone in portions, not less than two portions being used to fill the measurement zone, the said portions of equal volume are alternately put in the different parts of the horizontal section of the measurement zone providing uniform filling and constant bulk density of the~~

~~product within the measurement zone and wherein a provision is made for readjustment of the optical path length of the measurement zone and for adjustment of the spectroscopic properties depending on the optical properties of the analysed product during the registration.~~

2. (currently amended) The method of claim 1, wherein registration of the spectroscopic properties of the sample is carried out at a provisional length of an optical length of the measurement zone, wherein the said length of the optical path of the measurement zone is set depending on the a value of optical absorption of the measured sample in the a measured spectral range, ensuring that the a value of the an optical density of the analysed sample would be in the a range for the highest precision of the a measurement of the sample.
3. (currently amended) ~~The~~ A device for measurement of ~~the~~ spectroscopic properties of ~~the loose products that comprises~~ comprising:
a ~~loading~~ bunker,
an inlet ~~(receiver)~~ hole,
a portioned sampling unit, wherein the portioned sampling unit receives products through the inlet,
a measurement zone positioned below the portioned sampling unit,
a measuring unit,
a unit ~~for closing the measurement zone~~ closing unit,

~~an outlet (discharge) hole through which products are discharged from the measurement zone, and~~

~~a sample drawer;~~

~~wherein the measurement zone includes a horizontal section with different areas,~~

~~wherein the means are introduced in the portioned sampling unit includes means~~

~~for continuous-uniform product-portioned sampling of the product into the~~

~~measurement zone, which means is operative to substantially loading alternately~~

~~load portions of the products to the different areas of the horizontal section of the~~

~~measurement zone, that- and which means ensures consequent-filling of the~~

~~measurement zone with not less than two portions of substantially equal volume~~

~~of the products, the measurement zone being equipped with the means for~~

~~measurement of optical path length~~

~~wherein the measuring unit is operative to measure spectroscopic properties of~~

~~the products across the different areas of the horizontal section.~~

4. (currently amended) The device of claim 3, wherein the portioned sampling unit is made as a paddle wheel, wherein the means of for uniform portioned sampling of the product into the measurement zone consequent-filling of the product alternately to the different areas of the horizontal section of the measurement zone are made as paddles alternately inclined with respect to ~~the~~ a plane perpendicular to the an axis of the paddle wheel-axis, wherein the paddles each have a the shape of the paddles is defined by corresponding to an the area of the

respective horizontal section of the measurement zone to which the respective paddle loads a portion of the product.

5. (currently amended) The device of the claim 3, wherein the portioned sampling unit is made in a form of a conveyor belt, wherein the means ~~of~~for uniform portioned sampling of the product into the measurement zone ~~consequent filling of the product alternately to the different areas of the horizontal section of the measurement zone~~ are made as paddles alternately inclined with respect to the ~~a~~ direction of the belt movement, wherein the paddles each have a the shape of ~~the paddles is defined by the~~ corresponding to an area of the respective horizontal section of the measurement zone to which the respective paddle loads a portion of the product.
6. (currently amended) The device of the claim 3, wherein the means ~~of~~for uniform portioned sampling of the product into the measurement zone ~~consequent filling of the product alternately to the different areas of the horizontal section of the measurement zone~~ ~~allow the~~ includes a plate ~~to be placed~~ between the portioned sampling unit and the measurement zone parallel to the ~~a~~ light beam direction of the measuring unit and splitting the ~~a~~ channel that connects the ~~sample portion~~ portioned sampling ~~loading~~ unit with measurement zone.
7. (currently amended) The device of the claim 3, wherein the means ~~of~~for uniform portioned sampling of the product into the measurement zone ~~consequent filling~~

~~of the product alternately to the different areas of the horizontal section of the measurement zone provide~~ includes a shutter made in a form of a rotating wheel with holes therethrough ~~that are made on the~~ located at different distances from the rotation ~~an axis of rotation of the rotating wheel,~~ the shutter and the portion sampling unit having the same drive.

8. (currently amended) The device of the claim 7, wherein the shutter and the portioned sampling unit are driven by a common drive, wherein the portioned sampling unit is made in a form of a screw feeder.
9. (currently amended) The device of claim 3 wherein the measurement zone is equipped with ~~the a~~ means for measurement of ~~the an~~ optical path length of the measurement zone depending on ~~the~~ spectroscopic properties and bulk density of the ~~measured product sample~~ products in the measurement zone.
10. (currently amended) The device of claim 9, wherein the means for measurement of the optical path length of the measurement zone are made in a form of a moving front wall of the ~~measuring measurement zone~~ that moves responsive to a moving wall drive unit and the an optical length control sensor.
11. (currently amended) The device of the claim 9 wherein the means for measurement of the optical path length of the measurement zone are made in a

form of a set of exchangeable optical cells with different optical lengths, the optical lengths closely coupled with the ~~sample portion leader~~ portioned sampling unit from ~~the an~~ upper side and with the unit for closing the measurement zone ~~classing unit~~ from the bottom side.

12. (currently amended) The device of claim 3, wherein the inlet (~~receiver~~) ~~hole~~ and the outlet (~~discharge~~) ~~hole~~ are shifted aside with respect to ~~the a~~ vertical line that goes through an ~~the rotating~~ axis of rotation of the wheel.
13. (previously presented) The device of claim 3, wherein the measurement zone closing unit is made in a form of a dosing device that allows portioned discharge of the product from the measurement zone.
14. (previously presented) The device of claim 13, wherein said dosing device is made in a form of a paddle wheel.
15. (previously presented) The device of claim 13 wherein said dosing device is made in a form of a screw feeder.
16. (previously presented) The device of claim 13, wherein said dosing device is made in a form of a conveyor belt.

17. (new) A device for measurement of spectroscopic properties of loose products comprising:

a portioned sampling unit;

a measurement zone, wherein the measurement zone includes a horizontal section with different areas, wherein the portioned sampling unit is adapted to carry out uniform product loading substantially alternately to the different areas of the horizontal section of the measurement zone, that ensures filling of the measurement zone with at least two portions of substantially equal volume of the products; and

a measuring unit, wherein the measuring unit is operative to measure spectroscopic properties of the products across the different areas of the horizontal section.